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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,739	09/25/2006	Kazuo Tagawa	07481.0044	6221
22852	7590	08/23/2010		
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER VASISTH, VISHAL V	
			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			08/23/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/565,739

Applicant(s)

TAGAWA ET AL.

Examiner

VISHAL VASISTH

Art Unit

1797

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Amendment

1. Applicants' response filed on 6/11/2010 amended independent claims 1 and 10 and dependent claims 8-9, 13 and 15 and cancelled claim 18. Applicants' arguments regarding the 35 USC 102 rejection over Shimomura JP are persuasive and therefore this rejection is withdrawn. Shimomura JP does not disclose the specific oil agent as recited in instant claims 1 and 10. For reasons discussed below applicants' amendments do not overcome the 35 USC 103 rejections over Kawahara in view of Shimomura.

Information Disclosure Statement

2. The information disclosure statements filed on 6/9/2010 and 7/15/2010 fail to comply with 37 CFR 1.97(c) because it lacks a statement as specified in 37 FR 1.97(e). It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

3. Claims 1 and 10 are objected to because of the following informalities: the claims currently recite, "polyester," and should recite, "polyol esters." Appropriate correction is required.

4. Claims 1 and 10 are objected to because of the following informalities: both claims list several base oils in improper Markush language, the claim should read, "at least one base oil type selected from the group consisting of . . ." see MPEP 2173.05(h). Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

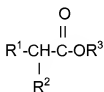
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al., US Patent No. 6,667,285 (hereinafter referred to as Kawahara). The examiner notes that this is the US national phase application (therefore in English) of WIPO application No. WO/2000/068345 which is in Japanese but does have a 102(b) date in view of Shimomura et al., US Patent No. 6,228,282 (hereinafter referred to as Shimomura).

Kawahara discloses a lubricating oil composition for refrigerators comprising base oils such as hydrocarbon oils wherein the combination of base oils has a kinematic viscosity at 40°C is 4 to 36 mm²/s (as recited in claims 1 and 10) (Col. 3/L. 39 and Col. 20/L. 14-17), antiwear agents such as tricresyl phosphate (phosphorus-based extreme pressure agent as recited in claims 1, 10 and 12) and at least one aliphatic saturated branched-chain carboxylic acid monoalkyl ester represented by the formula:



wherein when R² is hydrogen, R¹ is a branched-chain alkyl and R³ is C₁-C₂₀ straight-chain alkyl monoesters of a monobasic fatty acid having 12 or more carbon atoms and a monohydric alcohol having 1-24 carbon atoms (oil agent of claim 1 and ester oil agent as recited in claim 5 and linear dibasic acid and monohydric alcohol of claims 6-7, 10 and 14) (Col. 2-3/L. 64-15).

The composition of Kawahara may further contain other base oils such as alicyclic dicarboxylic acid esters esterified by monohydric alcohols (esters of alicyclic dibasic acids and monohydric alcohols as recited in claims 9 and 16) (Col. 14/L. 21-26 and Col. 15-16/L. 55-3) and epoxy compounds in order to improve thermal and hydrolytic stability (epoxy compound as recited in claims 4 and 13) (Col. 20/L. 59-68).

Kawahara further that the ratio of aliphatic saturated branched-chain carboxylic acid monoalkyl ester to hydrocarbon oil is 0.5:99.5 wt% to 99.5:0.5 wt% (which overlaps with the range as recited in claims 8 and 15).

Kawahara discloses all of the limitations as applied to claim 1 as discussed above. Kawahara discloses antiwear agents which include phosphate and phosphite compounds, and Kawahara further discloses the use of sulfur-based additives. Kawahara, however, does not explicitly disclose the presence of a phosphorothionate additive.

Shimomura discloses a refrigerator oil composition comprising an alicyclic polycarboxylic acid ester compound, an epoxy compound and additives which improve wear resistance and load capacity such as phosphoric esters (phosphorus compound) and sulfur compounds to further improve wear resistance and load capacity such as phosphorothionates (as recited in claims 1 and 11-12) (Col. 7-8/L. 16-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the composition of Kawahara with the phosphorothionates of Shimomura in order to enhance the wear resistance and load capacity of the composition (Col. 8/L. 18-20 of Shimomura).

Kawahara in view of Shimomura do not explicitly disclose the pour point of the base oil ranging from -40°C to -25°C as recited in instant claim 17. It is the position of the examiner that Kawahara/Shimomura disclose the same base oil recited in the instant claims and would therefore inherently have a pour point that is within the recited range.

Response to Arguments

8. Applicants' arguments filed on 6/11/2010 with respect to claims 1 and 4-17 have been considered and are not persuasive.

Firstly applicants' arguments regarding Shimomura JP are moot because that rejection has been withdrawn.

Secondly, independent claims 1 and 10 are written with the transitional phrase "comprising of" and not "consisting of" which is close-ended. The claims recite several base oils which are preceded by the phrase "consisting of," which looks more like Markush language and would still allow for additional base oils.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Schnur, US Patent Application Publication No. 2001/0038088 (hereinafter referred to as Schnur).

Schnur discloses a refrigerant lubrication composition comprising a polyol ester lubricant with a kinematic viscosity of preferably not more than 110 cSt at 40°C and additives including tricresyl phosphate, triphenylphosphorothionate and lubricity additives such as long chain derivatives of fatty acids and natural oils such as esters.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action

and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VISHAL VASISTH whose telephone number is (571)270-3716. The examiner can normally be reached on M-R 8:30a-5:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571)272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VVV

/Ellen M McAvoy/
Primary Examiner, Art Unit 1797